

C L A I M S

1.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" formed by artificial, synthetic fibres cut or in monofilaments and their mixtures, previously treated with anti-bacterial compounds characterised by the fact that the non woven fabric is formed by any of the following fibres:

- a) Natural polymer chemical fibres which have or have not been modified.
- 15 b) Synthetic polymer chemical fibres.
- c) Various fibres such as:
 - o Glass
 - o Carbon
 - o Other fibrous materials
- 20 o Bicomponents and polycomponents

2.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous claim characterised by the fact that the non woven fabric may comprise a mixture of fibres in the first claim with a proportion of one of the others from 30 0.5 to 99.5%.

3.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA

PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous claims characterised by the fact that the range of non woven fabric fibres in the first and second claims

5 shall be as follows:

- Fibre thickness from 0.02 to 1,500 deniers.
- Cross section of fibres: circular, square, elliptical, hollow, trilobal, flat and similar.
- Fibre lengths from 0.1mm to 500mm and continuous filaments.
- Non woven fabric density in thicknesses of: 0.1 to 15cm.
- Non woven fabric weight: from 5 to 2,500 grams.
- Fibre fusion point: from 60° C to 450° C.

10 15 - Translucent / white to black and combinations thereof.

4.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE 20 INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous claims characterised by the fact that the manufacturing process for the non woven fabrics in the first and second 25 claims comprises the following operations:

- Selection of fibres already treated with antibacterial additives.
- Weighing of each and every fibre from the groups of fibres in the fibre mix.
- 30 - Mixing the same of different fibres.
- Forming a web or felt.

- The superimposition of several non woven fabric layers manufactured from the same fibre or from a mixture of different fibres.
- Joining one or more layers on non woven fabrics or 5 joining one or more layers with one or more layers of intermediate mesh and supports.
- Finishes of several different forms of thermofusion, additives and compounds for different treatments for special finishes for each application.
- 10 - Cutting, rolling and formatting of the non woven fabric or resulting compound.

5.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE 15 INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous claims characterised by the fact that the manufacturing process for the non woven fabrics in the first and second 20 claims comprises at least one of the following operations:

- Weighing the already treated fibre or fibres.
- Mixing the weighed fibres.
- Feeding into the carding machine.

25 - Directing and mixing the fibre or fibres in the carding machine forming a web.

- Forming a felt by folding and creasing of one or more webs in a cross lapper.
- Reducing the thickness of the felt in a pre-needle 30 puncher (according to the processes).
- Needle punching the felt with one or more needle plates (according to the processes).
- Structuring the felt (according to the processes).

- Calendaring. Thermofixing or induction (according to the processes).

- Formatting, cutting and rolling.

6.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN

5 FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous 10 claims characterised by the fact that the manufacturing process for the non woven fabrics in the first and second claims comprises some of the following operations:

- Weighing the already treated fibre or fibres.

- Mixing the weighed fibres.

15 - Feeding into the carding machine.

- Directing and mixing the fibre or fibres in the carding machine forming a web.

- Forming a felt by folding and creasing of one or more webs in a cross lapper.

20 - Reducing the thickness of the felt in a pre-needle puncher.

- Needle punching the felt with one or more machines.

- Structuring the felt.

- Calendaring.

25 - Rolling and formatting.

7.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous 30 claims characterised by the fact that the manufacturing

process for the non woven fabrics in the first and second claims comprises some of the following operations:

- Weighing the already treated fibre or fibres.
- Mixing the weighed fibres.
- 5 - Feeding into the carding machine.
- Directing and mixing the fibre or fibres in the carding machine forming a web.
- Forming a felt by folding and creasing of one or more webs in a cross lapper.
- 10 - Reducing the thickness of the felt in a pre-needle puncher.
- Needle punching the felt with one or more machines.
- Structuring the felt.
- Thermo-fixing the non woven fabric.
- 15 - Rolling and formatting.

8.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA 20 PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous claims characterised by the fact that the manufacturing process for the non woven fabrics in the first and second claims comprises some of the following operations:

- 25 - Weighing the already treated fibre or fibres.
- Mixing the weighed fibres.
- Feeding into the carding machine.
- Directing and mixing the fibre or fibres in the carding machine forming a web.
- 30 - Forming a felt by folding and creasing of one or more webs in a cross lapper.
- Reducing the thickness of the felt in a pre-needle puncher.

- Needle punching the felt with one or more machines.
- Structuring the felt.
- Inducing the non woven fabric with resins.
- Drying.

5 - Rolling and formatting.

9.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous claims characterised by the fact that the manufacturing process for the non woven fabrics in the first, second and third claims comprises some of the following operations:

- Weighing the already treated fibre or fibres.
- Mixing the weighed fibres.
- Feeding into the felting machine.
- Directing and mixing the fibre or fibres in the carding machine forming a web.
- Forming the felt by projecting the fibre onto a grid.
- Reducing the thickness of the felt with a thickness regulator.
- Needle punching the felt with one or more machines.

25 - Thermofixing using calendars, infra-red, hot gas or air.

- Rolling and formatting.

10.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous

claims characterised by the fact that the manufacturing process for the non woven fabrics in the first, second and third claims comprises some of the following operations:

- 5 - Weighing the already treated fibre or fibres.
- Mixing the weighed fibres.
- Feeding into the felting machine.
- Directing and mixing the fibre or fibres in the carding machine forming a web.
- 10 - Forming the felt by projecting the fibre onto a grid.
- Reducing the thickness of the felt with a thickness regulator.
- Needle punching the felt with one or more machines.
- Thermo-fixing using calendars, infra-red, hot gas or
- 15 air.
- Rolling and formatting.

11.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE 20 INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous claims characterised by the fact that the manufacturing process for the non woven fabrics in the first, second 25 and third claims comprises some of the following operations:

- Mixing chippings from the first claim with chippings treated with Legionella anti-bacterials.
- Extruding the chippings.
- 30 - Forming the fibres in monofilaments or continuous filaments.
- Forming a web.
- Forming a felt by projecting the fibre onto a grid.

- Reducing the thickness of the felt with a thickness regulator.
- Needle punching the felt with one or more machines.
- Thermofixing using calendars, infra-red, hot gas or air.
- Rolling and formatting.

5 **12.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE**
10 **INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous**
15 **claims characterised by the fact that the manufacturing process for the non woven fabrics in the first, second and third claims comprises some of the following operations:**

- Weighing the already treated fibre or fibres.
- Mixing the weighed fibres.
- Feeding into the felting machine.
- Directing and mixing the fibre or fibres in the carding machine forming a web.
- Forming the felt by disorientating, folding and creasing one or more webs, in a cross lapper or felting machine.
- Sewing the felt with one or more machines.
- Structuring the felt.
- Thermofixing.
- Rolling and formatting.

25 **13.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE**
30 **INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA**

PNEUMOFILA PROLIFERATION" in accordance with the previous claims characterised by the fact that the manufacturing process for the non woven fabrics in the first, second and third claims, after any of the above processes or 5 interspersed in the same, may form compound and sandwich non woven fabrics, from other treated or non treated woven and non woven fabrics, with polypropylene, polyethylene, polyester, glass fibre, aluminium, steel, mechanically or thermally treated or untreated foam with 10 additives mesh supports.

14.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA 15 PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous claims characterised by the fact that the fourth to twelfth claims may be used in different applications with some of the following equipment:

20 Splitters, mixers, carding machines, cross lappers, felt machines, sewing machines, extruders, injectors, laminators, pre-needle punching machines, needle punchers, structurers, calendars, drying and thermofixing ovens, electrically resistant machines, direct or 25 indirect gas flame machines, infra red thermofusion machines, embossers, welders, gluers, latex or resin and anti-bacterial component inductors, ultrafrequency machines, felting machines, fulling machines, powder application machines, fabric gluing machines, padding machines, scrapers, and others.

30 15.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA

PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous claims characterised by the fact that the manufacturing process for the non woven fabrics in the first, second 5 and third claims comprises some of the following operations:

- Mixing chippings from the first claim with chippings treated with Legionella anti-bacterials.
- Extruding the chippings and/or fluid mixture.
- 10 - Injecting the product.
- Structuring or laminating the compound.
- Covering or not covering the treated or untreated non woven fabric.
- Calibrating the thickness of the compound with a 15 thickness regulator.
- Drying and polymerising.
- Thermofixing with calendars infra-red, hot gas or air.
- Rolling and formatting.

20 Plus, based on the first claim:

High and low density polyethylenes, PVC, Nylon, Teflon, Silicones, Polyesters, Polycarbonates, Metacrylite, Polyolephines, Hydrocarbons in chain, Thermohardeners, Thermoplastics.

25 **16.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous 30 claims characterised by the fact that the manufacturing process for the non woven fabrics in the first, second and third claims comprises some of the following operations:**

- Mixing chippings from the first claim with chippings treated with Legionella anti-bacterials.
- Extruding the chippings. And/or fluid mixture.
- Injecting the product.

5 - Structuring or laminating the compound.

- Covering or not covering the treated or untreated non woven fabric.
- Calibrating the thickness of the compound with a thickness regulator.

10 - Drying and polymerising.

- Thermofixing with calendars infra-red, hot gas or air.
- Rolling and formatting.

Plus, based on the first claim:

15 High and low density polyethylenes, PVC, Nylon, Teflon, Silicones, Polyesters, Polycarbonates, Metacrylite, Polyolephines, Hydrocarbons in chain, Thermohardeners, Thermoplastics, nitrogen mixtures, helium, phenols, inert gas, Aphodicarbonamides, foam making liquids, polyol,

20 TDI, Toluene isozionate, Polyester, HR, etc with thicknesses up to 125 cm³.

17.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE

25 INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA IN ANY INSTALLATION AT RISK FROM LEGIONELLA PNEUMOFILA PROLIFERATION" in accordance with the previous claims characterised by the fact that the anti-bacterial treatment are carried out using silver based derivatives,

30 phenoyhalogenate derivatives with transporters, plus permethrine derivatives, isothiazolinone derivatives, tetraalkylammonium silicones, organozinc compounds, zirconium phosphates, sodium, all of the above in solid

or liquid form, plus other products likely to comply with this anti-Legionella bactericide.

18.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS

5 WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA FROM ANY COOLING EQUIPMENT, HEAT EXCHANGERS, TANKS, CONTAINERS, VENTILATORS AND ANY OTHER EQUIPMENT WHICH ACCUMULATES WATER AND MAY SPREAD IT AS AN AEROSOL"

10 of a non woven fabric and/or sheet or injected filtration structure, i.e. obtained from the manipulation of artificial and synthetic fibres, as well as injected filtration structures, using processes tending to form a felt, in order to be finally converted into a non woven 15 fabric, sheet, or injected filtration structure or alternatively using an injection process for the aforementioned sheets or injected structures, treated using preparations based on silver based derivatives, phenoyhalogenate derivatives with transporters, plus 20 permethrine derivatives, isothiazolinone derivatives, tetraalkylammonium silicones, organozinc compounds, zirconium phosphates, sodium, triazine, oxazolidines, isotiazolones, hermiformals, ureides, isocynates, chorine derivatives, formaldehydes, carbenacime, or chippings or 25 a mixture of chippings treated with similar products characterised by the fact that the anti-bacterial treatment process is carried out directly on the non woven fabrics, filters, injected filtration sheets.

19.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS

30 WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA FROM ANY COOLING EQUIPMENT, HEAT EXCHANGERS, TANKS, CONTAINERS, VENTILATORS AND ANY OTHER EQUIPMENT

WHICH ACCUMULATES WATER AND MAY SPREAD IT AS AN AEROSOL" according to the 18th claim characterised by the fact that copper, zinc and tin derivatives are used for this treatment or any other metal element with a similar 5 nature to those stated in terms of their ability to release positive and negative ions.

20.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE 10 INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOPILA FROM ANY COOLING EQUIPMENT, HEAT EXCHANGERS, TANKS, CONTAINERS, VENTILATORS AND ANY OTHER EQUIPMENT WHICH ACCUMULATES WATER AND MAY SPREAD IT AS AN AEROSOL" according to the 17th, 18th and 19th claims characterised 15 by the fact that in the application processes of products derived from copper zinc and similar products and the nature of the additional additives shall be as follows depending on the nature of the final compound:

- Microscopic powders.
- 20 - Application in solution, suspension, or aqueous emulsion or any other type of liquid if technically possible.
- Application in a mixture with polyethylene, polyamid, EVA chippings, EVA, different types of hot melt 25 adhesives or of any other natures.

Application procedures:

- Liquid, mainly aqueous medium bath.
- Spray.
- Atomiser.
- 30 - Sheet.
- Inducted.
- Thermofixed.
- Applied.

- Injected.
- Immersed in any of the media listed above.
- Plus any other common procedure in industrial fabrics, plastics and foams, which are technically equivalent to those listed and applicable to the characteristics of the invention.

21.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE 10 INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOPHILA FROM ANY COOLING EQUIPMENT, HEAT EXCHANGERS, TANKS, CONTAINERS, VENTILATORS AND ANY OTHER EQUIPMENT WHICH ACCUMULATES WATER AND MAY SPREAD IT AS AN AEROSOL" of a non woven fabric and/or sheet or injected filtration 15 structure, i.e. obtained from the manipulation of artificial and synthetic fibres, as well as injected filtration structures, using processes tending to form a felt, in order to be finally converted into a non woven fabric, sheet, or injected filtration structure or 20 alternatively using an injection process for the aforementioned sheets or injected structures, treated using preparations based on silver based derivatives, phenoyhalogenate derivatives with transporters, plus permethrine derivatives, isothiazolinone derivatives, 25 tetraalkylammonium silicones, organozinc compounds, zirconium phosphates, sodium, triazine, oxazolidines, isothiazolones, hermiformals, ureides, isocynates, chorine derivatives, formaldehydes, carbenacime, or chippings or a mixture of chippings treated with similar products 30 characterised by the fact that the anti-bacterial treatment process is carried out directly on the non woven fabrics, filters, injected filtration sheets obtained by the manufacturing process shall be applied in addition to filtration methods for Legionella Pneumophila,

for all types of Legionella, anthrax A and B flu, Avian flu or acute serious respiratory syndrome (ASRS) using the addition of compounds grouped by families and active groups to be used in new applications:

- 5
 - Glutaraldehyde
 - Hypochlorite salts
 - Chloroisocyanurates
 - Sodium bromide
 - 2,2-dibromo-3-nitrilopropionamide (DBNPA)
- 10
 - N-trichloromethyl-thio)ftalamide (Folpet)
 - 10,10'-oxibisphenoxyarsine (OPA)
 - Denatonium Benzoate
 - 1-bromo,1-bromomethyl-1,3 propanodicarbonitrile
 - Tetrachloroisoeftalonitrile
- 15
 - Poly(oxyethylene) (dimethylimine)ethylene
(dimethylim)ethylendichloride
 - Methylene bisthiocyanate (MBT)
 - Dithiocarbamate
 - Cyanodithiomidocarbamate
- 20
 - 2-(2-bromo-2-nitroethenyl)furan (BNEF)
 - Beta-bromo-beta-nitrostyrene (BNS)
 - Beta-nitrostyrene (NS)
 - Beta-nitrovinylfuran (NVF)
 - 2-bromo-2-bromomethyl-glutaronitrile (BBMGN)
- 25
 - 1,4-bis(bromoacetoxy)-2-butene
 - Acroline
 - Bis(tributyltin) oxide (TBTO)
 - 2-(tert-butylamine)-4-chloro-6-(ethylamine)-s-triazine
- 30
 - Tetraalkyl phosphonium chloride
 - 7-oxabicyclo[2.2.1]heptane-2,3-dicarboxilic acid

- 4-5dichloro-2-n-octil-4-isozialine-3- dicarboxilic acid

- 1-bromo-3-chloro-5.5-dimethyldanton (BCD)

- Zinc piriton

5 • Alcohols:

- 2-methyl-5-nitromidazol-1-ethanol

- 2-bromo-2-nitropropane-1.3diol

- 2-(tiocyanomethylthio)benzitiazol (TCTMB)

- Terpineol

- Timol

- Chloroxylenol

- C12-C15 etoxiade fatty alcohol

- 1-metoxi-2-propanol

10 • Amines:

- 2-decylthioethylamine (DTEA)

- Alkyldimethylbenzylammonium chloride

- Tetrahydro-3.5-dimethyl-2H-1.3.5-hydrazine-2-tione

- 2-bromo-4-hydroxiacetophenone

- 2-N-octil-isothiazolin-3-one (OIT)

- Alkyldimethylamine coco oxide

- N-coco alkyltrimethylenamine

- 4-5-dichloro-2-n-octil-4-isozialine-3-one

- Tetralkylammonium silicon

25 • Organosulphur compounds:

- Bis(trichloromethyl) sulphone

- S-(2-hydroxipropyl)tiomethanosulphonate

- Tetrakis(hydroxymethyl) phosphonium sulphate (THPS)

30

- Mercaptopyridine N-oxide (pyritione)
- Copper salts:
 - Copper sulphate
 - Basic copper carbonate
 - Copper and ammonium carbonate
 - Copper hydroxide
 - Copper oxychloride
 - Cupric oxide
 - Cuprous oxide
 - Copper and calcium powder
 - Copper silicate
 - Copper sulphate
 - Copper sulphate and tribasic potassium (Bordeaux mixture)
- 15 • Isothiazolones:
 - 4,5-dichloro-isothiazolinone (DCOIT)
 - Butyl-benziisothiazolinone (butyl-BIT)
 - Methylisothiazolone
 - 2-N-actil-isothiazolin-3-one (OIT)
- 20 • Guanidines:
 - Dodecylguanide acetate
 - Dodecylguanade hydrochloride
 - Polyhexamethylenbiguanide (PHMB)
- 25 • Salt of quaternary ammonium:
 - 3-trimethoxy sylildimthyoctadecyl ammonium chloride (Silanequat)
 - Alkyl dimethyl benzylammonium chloride
 - 4-methylbenzoate dodecyl-di-(2-hydroxethyl)-benzyl ammonium
- 30 • Phenols and chlorinated phenols:

- 5-chloro-2-(2,4-dichlorophenoxi) phenol
- 2,4,4'-trichloro-2'-hydroxyphenyl ether (Triclosan)
- 5 • m-phenoxybenoil-3-(2,2-dichlorovinyl-dimethylcyclo propane carboxylate
- Trichlorophenoxyphenol (TCP8)
- 1,23-benzothiadiazol-7-acid
- Thiocarboxylic-s- methyl ester
- 10 • 4-chloro-3-methyl-phenol
- Timol
- Saligenin
- O-phenylphenol
- Colourings:
 - 15 • Methylene blue
 - Brilliant green
 - Gentian violet and dimethyl gentian violet
- Iodophors:
 - 20 • Poly vinyl pyrrolidone
 - Iodated povidone

The following specific anti-virals against common and avian flu have been added to the above compounds
25 complementing this family of patents:

- Adamantanes:
 - Amantadine
 - Rimantadine
- Neuraminidase inhibitors:
 - 30 • Zanamivir
 - Oseltamivir or ribavarin

The following algaecides have been added to the above compounds complementing this family of patents:

- Tributyl tin and derivatives
- Sodium thiosulphate

5 The following fungicides have been added to the above compounds complementing this family of patents:

- Benzene substitutes:
 - Chloroneb
 - Chlorotalonil
 - Dichloran
 - Hexachlorobenzene
 - Pentachloronitrobenzene

10

- Thiocarbamates:
 - Metam-sodium

15

- Tirad
- Ziram
- Ferbam

- Ethylene-bis-dithiocarbamates:

- Maneb
- Zineb
- Nabam
- Mancozeb

20

- Thiophthalamides:
 - Captan
 - Captafol
 - Folpet

25

- Copper compounds:
 - Copper Phenylsalicylate
 - Copper Linoleate
 - Copper Naphthenate
 - Copper Oleate

30

- Copper Quinolinolate
- Copper Resinate
- Organostanic compounds:
 - Phenylstanic acetate
 - Phenylstanic chloride
 - Phenylstanic hydroxide
 - Triphenylstane
- Cadmium compounds:
 - Cadmium chloride
 - Cadmium succinate
 - Cadmium sulphate
- Other organic fungicides:
 - Anilazine
 - Benomyl
 - Cycloheximide
 - Dodine
 - Etridiazol
 - Iprodione
 - Metalaxy
 - Thiabendazole
 - Triadimefon
 - Tonaphtate (O-2-Naphthyl m, N-dimethylthiocarbanylate)
- Fluoroquinolones:
 - Fleroxacine
 - Cyprofloxacine
 - Chlorohexadine gluconate
- Compounds capable of incorporating metals in their structure:
 - Zirconium sodium phosphate
 - Aluminiums

- Calys
- Zeolites
- Exchange resins

22.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN
5 FABRIC ,AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS
WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE
INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA
PNEUMOFILA FROM ANY COOLING EQUIPMENT, HEAT EXCHANGERS,
TANKS, CONTAINERS, VENTILATORS AND ANY OTHER EQUIPMENT
10 WHICH ACCUMULATES WATER AND MAY SPREAD IT AS AN AEROSOL"
according to the first claim characterised by the fact
that in a filter with the characteristics claimed in this
family of patents its filtration capacity is optimised
and improved by adding additives during the manufacturing
15 process which facilitate the absorption of organic
biomaterial by the filter using adhesines or other
inorganic absorbents such as silica gel, activated carbon
fibres, zeolites, ionic exchange resins, diatomea and
perlite soils.

20 23.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN
FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS
WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE
INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA
PNEUMOFILA FROM ANY COOLING EQUIPMENT, HEAT EXCHANGERS,
25 TANKS, CONTAINERS, VENTILATORS AND ANY OTHER EQUIPMENT
WHICH ACCUMULATES WATER AND MAY SPREAD IT AS AN AEROSOL"
according to the first claim characterised by the fact
that the manufacturing process may be extended with
compounds claimed in the manufacture of filters for:

30 - Public fountains, domestic drinking water
distribution systems and other uses, in addition
to the traditional systems described in the main
patent.

- Pipes, water circulation systems in food packaging industries, water, drinks and foodstuff bottlers in general.
- Drinking water installations and equipment, the use of which runs the risk of contamination of the same: storage and distribution systems in airport terminal buildings, trains, ships and other similar locations.
- Cleaning and furnishing elements such as towels, curtains, sheets, pillows, bed covers, carpets, rugs, shower curtains, bath mats, bandages, cloths and other similar products used in public buildings used for health purposes, such as clinics, sanatoria, hospitals, laboratories and installations and other similar buildings.
- Showers and eyewashes, toilets, bidets, bath tubs, taps, air and water conduits, heating systems and any element likely to be contaminated using the installation of filters with anti-bacterial, anti-Legionella, antiviral, antifungal properties.
- Manufacture of personal protection filtration masks, safety suits for contaminated atmospheres, cloths and other items of clothing and cleaning for working in installations at risk, such as bird rearing industries and safety laboratories.
- Manufacture of filters for dialysis equipment for filtering hot water, waste products and water accumulated by the organism.
- Floating fabric and non woven fabric filters equipped with buoyancy by the fabrics themselves or other systems to protect aquifers, tanks, thermal water, water conduction and treatment plants.

- Trenches around trees and wrappings for tree trunks with fungicide activity to protect "Quercus" meadows, flower pots and other types of plants from attack from *Phytophthora cinnamomi*.

5 **24.-** "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA FROM ANY COOLING EQUIPMENT, HEAT EXCHANGERS, 10 TANKS, CONTAINERS, VENTILATORS AND ANY OTHER EQUIPMENT WHICH ACCUMULATES WATER AND MAY SPREAD IT AS AN AEROSOL" according to the previous claims characterised by the fact that the manufacturing process may also include filter membrane and plate manufacturing processes used 15 for the fibres in the claim.

25.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA FROM ANY COOLING EQUIPMENT, HEAT EXCHANGERS, 20 TANKS, CONTAINERS, VENTILATORS AND ANY OTHER EQUIPMENT WHICH ACCUMULATES WATER AND MAY SPREAD IT AS AN AEROSOL" according to the manufacturing processes in the fourth to seventeenth claims of the main patent and the fifth 25 claim in the additional patent characterised by the fact that they include a plasma and/or carbon activation treatment in the fibres used.

26.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS 30 WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOFILA FROM ANY COOLING EQUIPMENT, HEAT EXCHANGERS, TANKS, CONTAINERS, VENTILATORS AND ANY OTHER EQUIPMENT WHICH ACCUMULATES WATER AND MAY SPREAD IT AS AN AEROSOL"

according to the previous claims characterised by the fact that obtaining the different products claimed in this family of patents are obtained by conventional filament fabric methods.

5 **27.- "PRODUCTION METHOD AND FILTER COMPRISING NON WOVEN FABRIC AND/OR FILTERING INJECTOR STRUCTURES OR SHEETS WHICH ARE OBTAINED USING SAID METHOD AND WHICH ARE INTENDED FOR THE FILTRATION AND ELIMINATION OF LEGIONELLA PNEUMOPHILA FROM ANY COOLING EQUIPMENT, HEAT EXCHANGERS,**
10 **TANKS, CONTAINERS, VENTILATORS AND ANY OTHER EQUIPMENT WHICH ACCUMULATES WATER AND MAY SPREAD IT AS AN AEROSOL"** according to the first claims characterised by the fact that obtaining the different products claimed in this family of patents are obtained by conventional filament
15 fabric methods.